### PATENT COOPERATION TREATY



# **PCT**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference HP197	FOR FURTHER ACTION	See Form PCT/IPEA/416				
International application No. PCT/JP2003/004069	International filing date (day/month/yed 31 March 2003 (31.03.2003)					
International Patent Classification (IPC) or n D02G 3/38	ational classification and IPC					
Applicant HIROTA, Yusuke						
<ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>						
2. This REPORT consists of a total of sheets, including this cover sheet.						
3. This report is also accompanied by A	·					
a. (sent to the applicant and	to the International Bureau) a total of _	2 sheets, as follows:				
	taining rectifications authorized by this a	ve been amended and are the basis of this report authority (see Rule 70.16 and Section 607 of the				
	sure in the international application as f	ority considers contain an amendment that goes led, as indicated in item 4 of Box No. I and the				
	, containing a sequence dicated in the Supplemental Box Relati	e type and number of electronic carrier(s)) isting and/or tables related thereto, in computer ng to Sequence Listing (see Section 802 of the				
This report contains indications relating to the following items:						
Box No. I Basis of the re	Box No. I Basis of the report					
Box No. II Priority	Box No. II Priority					
Box No. III Non-establish	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
Box No. IV Lack of unity	Box No. IV Lack of unity of invention					
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
Box No. VI Certain docum	nents cited					
Box No. VII Certain defects	s in the international application					
Box No. VIII Certain observ	rations on the international application					
Date of submission of the demand	Date of complete	ion of this report				
30 August 2004 (30.08.	2004)	11 May 2005 (11.05.2005)				
Name and mailing address of the IPEA/JP	Authorized office	ег				
Facsimile No.	Telephone No.	·				

Form PCT/IPEA/409 (cover sheet) (January 2004)

Translation

International application No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

PCT/JP2003/004069

Box No.	· I	Basis of the report	
		I to the language, this report is based on the international application in the landicated under this item.	nguage in which it was filed, unless
		report is based on translations from the original language into the following the is language of a translation furnished for the purpose of:	ng language,
		international search (under Rules 12.3 and 23.1(b))	
		publication of the international application (under Rule 12.4)	
		international preliminary examination (under Rules 55.2 and/or 55.3)	
1			
furni	shed to	d to the elements of the international application, this report is based on the receiving Office in response to an invitation under Article 14 are referred annexed to this report):	(replacement sheets which have been red to in this report as "originally filed"
	The i	nternational application as originally filed/furnished	
	the d	escription:	
]	page	s <u>1-16</u>	, as originally filed/furnished
	page	<del></del>	
}	page	received by this Authority on	
	the c	laims:	
1	page	s 4, 6, 7	, as originally filed/furnished
1	page	s* 1-3, 5, 8-10, 13 , as amended (to	gether with any statement) under Article 19
}	page		
}	page	received by this Authority on	<del></del>
	the d	rawings:	
1	page	s	, as originally filed/furnished
1	page		
	page	received by this Authority on	
	a seq	uence listing and/or any related table(s) – see Supplemental Box Relating to S	equence Listing.
3.	The	amendments have resulted in the cancellation of:	
		the description, pages	
ĺ	A	the claims, Nos. 11, 12	
j	胃		
	뭄	the drawings, sheets/figs the sequence listing (specify):	
j	$\vdash$		
	Ш	any table(s) related to sequence listing (specify):	
4.	This	report has been established as if (some of) the amendments annexed to this, since they have been considered to go beyond the disclosure as filed, a	report and listed below had not been
1	(Rule	e, since may have been considered to go beyond the disclosure as filed, as 70.2(c)).	s mercared in the Supplemental Rox
}		the description, pages	
		the claims, Nos.	
		the drawings, sheets/figs	
		the sequence listing (specify):	
		any table(s) related to sequence listing (specify):	
* If iten	n 4 ap	plies, some or all of those sheets may be marked "superseded."	

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/JP 03/04069

11.7	D .
ν.	Reasoned statement under A wilds 25(2)
	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
	citations and explanations supporting such statement
	and explanations supporting such statement

Statement			
Novelty (N)	Claims	1-10, 13	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-10, 13	NO
Industrial applicability (IA)	Claims	1-10, 13	YES
	Claims		NO NO

2. Citations and explanations

Document 1: JP 5-179535 A

Document 2: JP 11-1835 A

Claims 1 to 10 and 13

Documents 1 and 2

Document 1 discloses a fiber material comprising a synthetic fiber containing titanium oxide and a natural fiber (claims, paragraph [0011]), and discloses the use of polyester fiber and nylon fiber as the synthetic fiber (paragraph [0011]).

Document 2 discloses a fiber material comprising a natural fiber and a polyester fiber containing titanium oxide (claims, paragraph [0011]).

Documents 1 and 2 do not make any particular disclosures pertaining to the use of silk or animal hair fibers as the natural fiber, but this type of fiber provides the same effect as natural fibers such as cotton, linen, or rayon, and the use thereof is merely a widely implemented feature (if more documentation pertaining to this feature is necessary, see: JP 4-257333 A (claim 3), WO 01/88237 A (claim 4), or JP 2002-275736 A (claim 2)).

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Further, the combination of titanium oxide and silk fiber is a merely a known technique, as the applicant himself notes in the presentation of prior art documents in the background art portion of the description.

Thus, a person skilled in the art could easily conceive of simply using the above two types of fiber—which are merely representative materials, widely used as materials that produce the same effect as natural fibers such as cotton, and which are known in combination with titanium oxide—as the natural fiber in the invention disclosed in documents 1 and 2.

Moreover, even considering the possible effect of selecting the above two fibers, the description cannot be said to provide any disclosure pertaining to the advantages of using the above two fibers. Further, a feature wherein a synthetic fiber is made to contain titanium oxide is disclosed in detail in documents 1 and 2, and as the applicant himself notes, it is known that titanium oxide prevents yellowing, and thus, the invention cannot be considered to produce an exceptional effect.